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the case of the East Nimba Nature Reserve (Liberia)**

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*Published in:*  
World Agroforestry Centre. 2009. Book of Abstracts, 2nd World Congress of Agroforestry

*Publication date:*  
2009

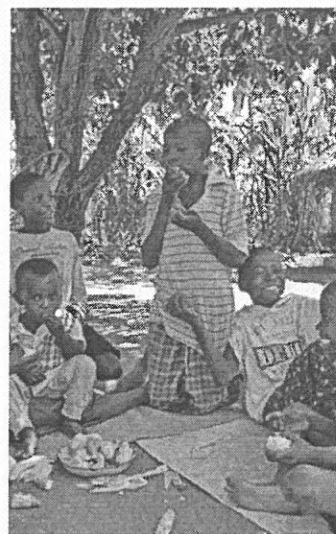
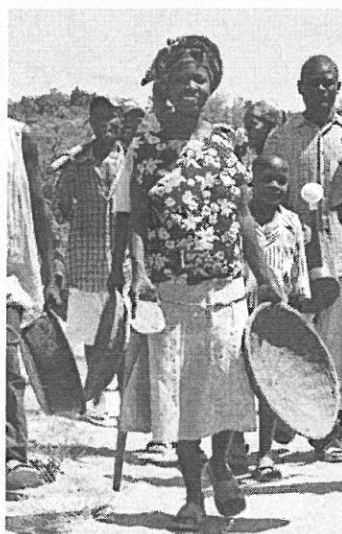
*Document version*  
Publisher's PDF, also known as Version of record

*Citation for published version (APA):*  
Sonwa, D. J., Asare, R., & Soniia, D. (2009). Using cocoa-agroforest for biodiversity conservation around protected areas: the case of the East Nimba Nature Reserve (Liberia). In *World Agroforestry Centre. 2009. Book of Abstracts, 2nd World Congress of Agroforestry* (pp. 157)



World Congress of  
Agroforestry 2009  
Nairobi Kenya 23-28 August

## Book of Abstracts



*Agroforestry - The Future of  
Global Land Use*

## Using cocoa-agroforests for biodiversity conservation around protected areas: the case of the East Nimba Nature Reserve (Liberia)

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**Session** 18. Agroforestry, climate change and biodiversity conservation

**Abstract** Cocoa agroforests constitute a land-use system, which mimics the forest and can buffer protected areas and help avoid edge effects. It can also create corridors between fragmented forest stands and allows cocoa farmers to earn diverse incomes through the sale and use of multiple produce while conserving nature. This also lays the basis for any payments for environmental services produced by the systems. The East Nimba Nature Reserve (ENNR) in northeast Liberia is part of the Upper Guinean Forests of West Africa and it is considered a biodiversity hotspot. The ENNR faces complex environmental and developmental challenges due to a marked trend of deforestation and land degradation. Population growth, increasing deterioration in existing agricultural lands, coupled with poverty of the local peoples, have resulted in severe pressure on resources in the reserve. To reverse this trend, the Sustainable Tree Crops Program (STCP) with support from the World Bank and USAID initiated a biodiversity conservation project in 2007 that seeks to use cocoa agroforestry to reduce the intensity of encroachment on the reserve. One of the main objectives is to improve cocoa farmers' awareness of the importance of biodiversity conservation since cocoa is one of the main cash crops in the landscape surrounding the reserve. This presentation discusses biodiversity conservation models that hinge on the local values of the area while relating them to universal issues. It also describes a participatory learning and demonstration approach proposed by STCP to encourage mutual learning between farmers and experts to create and share knowledge on the different (traditional and scientific) concepts of biodiversity conservation. It goes on to discuss processes used to train farmers and forestry authorities as community conservationists for the reserve. Finally, it ends with a recommendation on the idea of payment for environmental services to farmers in conservation.

## What are the added ecological values of multipurpose agroforestry trees for conservation of endangered arboreal wildlife species

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**Session** C1. AF, climate change, biodiversity conserv

**Abstract** Ecological values of multipurpose agroforestry tree species for the conservation of endangered arboreal forest-dwelling wildlife species were assessed in three non-contiguous habitat types within deforested habitats of southern Nigeria to establish their role in sustaining the resident wildlife population of the area. Intensive dendrological surveys within five purposively selected 100x100 m plots was carried out to identify and enumerate merchantable forest and agroforestry multipurpose trees combined with broad-sweep and rapid animal assessment of all studied sites from June 2007 – May 2008 using standard field equipment. Results show that the rainforest area under study has been denuded of 95% of merchantable indigenous trees, living oil palms and fruit trees as the only sizeable tree species available for wildlife species. Tree hyraxes, bush babies, galagoes, parrots, hornbills and wood peckers have disappeared with deforestation and are rare sights in the area. Whereas, farmsteads, regenerating forests and suburbia are dominant habitats and are unsuitable for endangered forest birds, reptiles and mammals. However, wild turacos, hornbills, wood peckers and parrots (birds); squirrels, bats, bush babies and hyraxes (mammals) and tree frogs, chameleons, varanus and snakes